

Claim Amendments:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A superconducting article, comprising:
a substrate; and
a layer of superconductor material overlying the substrate, said layer comprising a plurality of superconductor strips and at least one superconductive bridge coplanar with the plurality of superconductive strips, wherein (i) the plurality of superconductor strips overlying the substrate and extending extend along a longitudinal direction, the superconductor strips comprising first and second superconductor strips extending parallel to each other and being spaced apart from each other by a gap extending perpendicular to the longitudinal direction[[,]]; and the at least one ~~conductive~~ superconductive bridge electrically coupling at least the first and second superconductor strips with each other and spanning the gap, wherein the substrate has a dimension ratio of not less than about 10.
2. (Canceled)
3. (Original) The superconducting article of claim 1, wherein the superconductor strips are spaced apart from each other by an average gap width of at least 1 μm .
4. (Original) The superconducting article of claim 3, wherein said average gap width is not less than about 5 μm .
5. (Original) The superconducting article of claim 3, wherein the superconductor strips are spaced apart from each other by a substantially constant gap.

6. (Original) The superconducting article of claim 1, wherein the first and the second superconductor strips have an average width of at least 5 μm .

7. (Original) The superconducting article of claim 5, wherein the first and second superconductor strips have substantially the same width.

8. (Canceled)

9. (Currently Amended) The superconducting article of claim 1 ~~[[8]]~~, wherein the superconductor layer is formed by deposition to overlie the substrate.

10. (Currently Amended) The superconducting article of claim 1 ~~[[8]]~~, wherein the superconductor layer is subjected photolithographic processing to form the superconductive strips.

11. (Original) The superconducting article of claim 10, wherein the photolithographic processing is effective to remove portions of the superconductor layer, leaving behind the superconductor strips.

12. (Currently Amended) The superconducting article of claim 1, wherein the at least one ~~conductive~~ superconductive bridge comprises a plurality of ~~conductive~~ superconductive bridges, ~~comprised of superconductor material~~.

13. (Canceled)

14. (Currently Amended) The superconducting article of claim 12, wherein the ~~conductive~~ superconductive bridges are spaced apart generally periodically along a length of the substrate.

15. (Currently Amended) The superconducting article of claim 1, wherein the article comprises a minimum of one superconductive bridge per 100m of substrate.

16. (Currently Amended) The superconducting article of claim 1, wherein the article comprises at least one superconductive bridge per 50m of substrate.

17. (Currently Amended) The superconducting article of claim 1, wherein the article comprises at least one superconductive bridge per 10m of substrate.

18. (Currently Amended) The superconducting article of claim 1, wherein article comprises at least one superconductive bridge per 1m of substrate.

19. (Currently Amended) The superconducting article of claim 12, wherein the ~~conductive~~ superconductive bridges are spaced apart generally periodically along a length of the substrate.

20. (Original) The superconducting article of claim 1, further comprising at least one conductive shunt layer overlying the superconductor layer.

21. (Original) The superconducting article of claim 1, further comprising a biaxially textured layer, over which the superconductor layer is provided.

22. (Original) The superconducting article of claim 21, wherein the biaxially textured layer comprises an IBAD layer.

23. (Currently Amended) The superconducting article of claim 1, wherein the ~~superconductor layer of superconductor material strips are~~ is comprised of a high temperature superconductor.

24. (Original) The superconducting article of claim 23, wherein the high temperature superconductor comprises $\text{REBa}_2\text{Cu}_3\text{O}_{7-x}$, wherein RE is a rare earth element.

25. (Original) The superconducting article of claim 24, wherein the superconductor material comprises $\text{YBa}_2\text{Cu}_3\text{O}_7$.

26. (Original) The superconducting article of claim 1, wherein the substrate has a dimension ratio of not less than 10^2 .

27. (Original) The superconducting article of claim 1, wherein the substrate has a dimension ratio of not less than 10^3 .

28. (Original) The superconducting article of claim 1, wherein the article is in the form of a superconducting tape.

29. (Currently Amended) The superconducting article of claim 1, wherein the substrate, the superconductive strips, and the at least one ~~conductive~~ superconductive bridges-bridge form a superconductive tape, the article comprising a coil having a plurality of superconductive tapes.

30. (Currently Amended) The superconducting article of claim 1, wherein the article is a power transformer, the power transformer comprising at least a primary winding and a secondary winding, wherein at least one of the primary winding and secondary winding comprises a wound coil of superconductive tape, the superconductive tape comprising said substrate, said superconductor strips, and said at least one ~~conductive~~ superconductive bridges-bridge.

31. (Currently Amended) The superconducting article of claim 1, wherein the article is a rotating machine, the rotating machine comprising at least one winding, wherein the at least one winding comprises a superconductive tape formed of said substrate, said superconductor strips, and said at least one ~~conductive~~ superconductive bridges-bridge.

32. (Original) The superconducting article of claim 31, wherein the rotating machine is a power generator or motor.

33. (Canceled)

34. (Canceled)

35. (Canceled)

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Canceled)

41. (Canceled)

42. (Canceled)